

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: FAIL-SAFE

Report Number: P973618

Luminaire Tested: FLR2-22-25-L840-CP187

Issue Date: 3/13/2025

**Test Information**

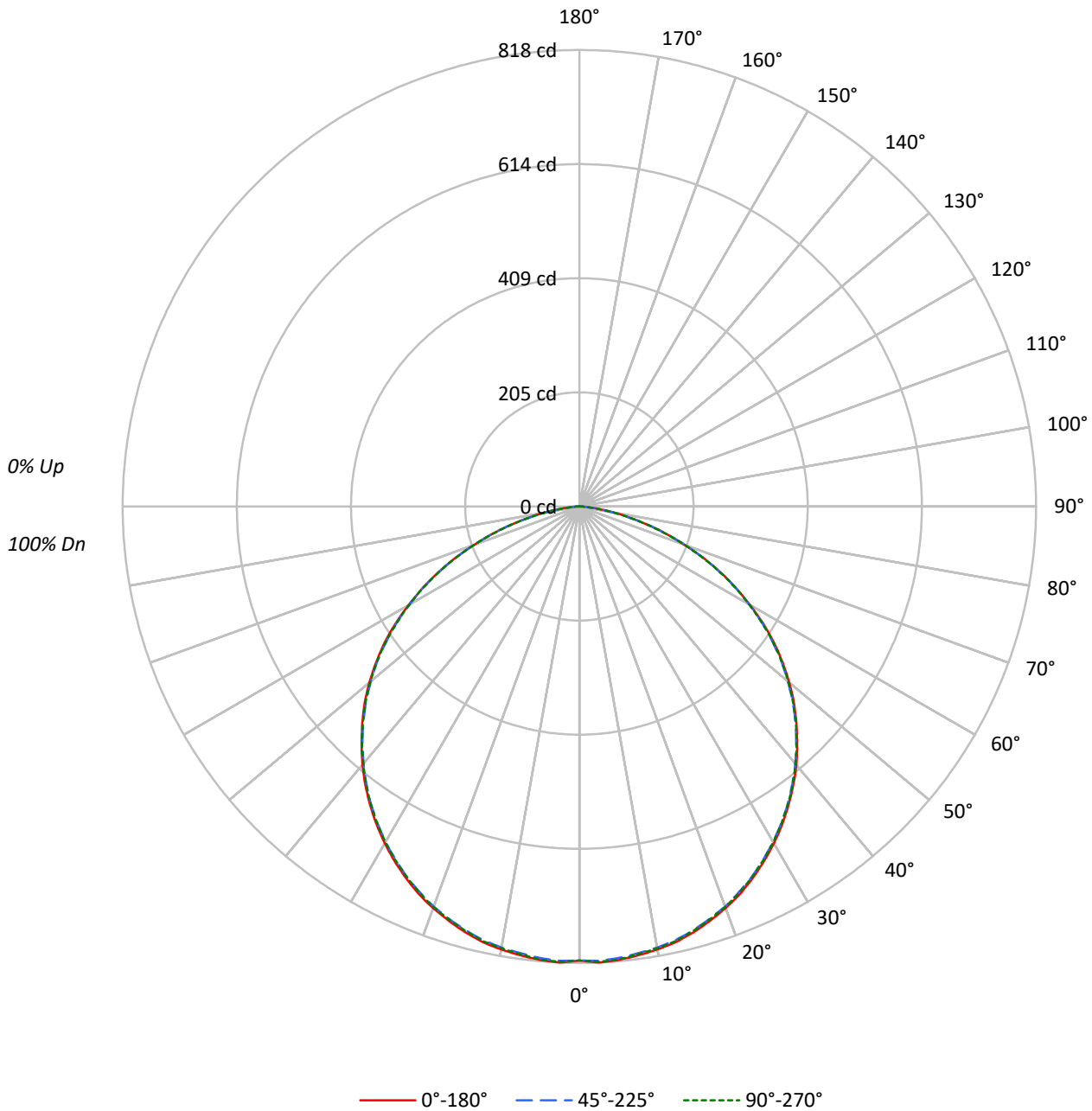
Test Method: LM-79-2019  
Report Number: P973618  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-22-25-L840-CP187  
Description: SHAPER SENSE CIRCLE  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2275.4 lumens  
Efficiency: N/A  
Efficacy: 120.4 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 18.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor:  
Total Harmonic Distortion (THDi):  
Frequency (hertz): 60  
Stabilization Time: HR  
Operation Time: HR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20										
RC	80									70									50									30									10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0														
RCR																																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																				
1	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85																				
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71																				
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60																				
4	83	71	63	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51																				
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44																				
6	71	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39																				
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34																				
8	61	47	39	33	59	47	39	33	45	38	33	44	37	32	43	37	32	30																				
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27																				
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25																				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2190	2190	2190
5°	2203	2194	2201
10°	2203	2193	2197
15°	2201	2191	2194
20°	2193	2185	2188
25°	2182	2173	2174
30°	2166	2157	2158
35°	2146	2138	2140
40°	2124	2113	2115
45°	2092	2083	2087
50°	2056	2041	2045
55°	1997	1981	1988
60°	1899	1891	1891
65°	1773	1769	1763
70°	1570	1578	1574
75°	1323	1311	1301
80°	950	934	927
85°	497	497	482

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2092 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.0	3.4
10°-20°	221.6	9.7
20°-30°	336.7	14.8
30°-40°	407.0	17.9
40°-50°	422.4	18.6
50°-60°	377.7	16.6
60°-70°	274.6	12.1
70°-80°	135.0	5.9
80°-90°	23.4	1.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	635.3	27.9
0°-40°	1042.3	45.8
0°-60°	1842.4	81.0
0°-90°	2275.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2275.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	814	814	814	814	814	
5°	816	806	812	809	815	78
15°	790	781	786	784	788	223
25°	735	727	732	730	732	339
35°	653	649	651	651	651	409
45°	550	547	547	548	548	424
55°	426	423	422	423	424	379
65°	278	279	278	278	277	275
75°	127	128	126	127	125	135
85°	16	17	16	16	16	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	813.7	813.7	813.7	813.7	813.7
2.5°	818.2	808.6	814.7	811.2	816.7
5°	815.7	806.1	812.2	809.1	814.7
7.5°	811.2	801.6	807.6	804.6	809.1
10°	806.1	796.1	802.6	799.6	804.1
12.5°	799.6	790.1	796.1	793.6	797.6
15°	790.1	781.0	786.5	784.5	787.5
17.5°	778.5	769.4	775.0	773.5	776.0
20°	765.9	757.4	762.9	761.4	763.9
22.5°	751.9	742.8	747.8	746.8	748.8
25°	734.8	726.7	731.8	730.2	732.3
27.5°	716.7	709.1	713.2	713.2	714.2
30°	697.1	690.0	694.1	694.1	694.6
32.5°	676.0	670.4	673.0	673.5	673.5
35°	653.3	648.8	650.8	651.3	651.3
37.5°	629.7	625.2	626.7	627.7	627.7
40°	604.6	600.6	601.6	602.6	602.1
42.5°	577.5	574.4	574.9	576.0	576.0
45°	549.8	547.3	547.3	548.3	548.3
47.5°	521.7	519.2	518.2	519.2	519.2
50°	491.0	488.5	487.5	488.5	488.5
52.5°	458.9	456.3	456.3	456.3	456.8
55°	425.7	423.2	422.2	423.2	423.7
57.5°	390.5	389.5	388.0	388.5	387.0
60°	352.8	352.8	351.3	352.3	351.3
62.5°	316.1	317.1	315.6	315.6	314.6
65°	278.4	279.4	277.9	277.9	276.9
67.5°	239.7	241.2	239.2	239.2	238.2
70°	199.5	202.5	200.5	201.0	200.0
72.5°	163.3	164.8	162.8	162.8	161.8
75°	127.2	128.2	126.1	126.6	125.1
77.5°	91.5	93.0	91.0	91.5	91.0
80°	61.3	61.8	60.3	60.8	59.8
82.5°	35.7	36.2	35.7	35.2	34.7
85°	16.1	16.6	16.1	16.1	15.6
87.5°	4.0	4.0	4.0	4.0	4.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)